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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/840,191	05/06/2004	Nicola M. Funnell	1578.612 (PUS-1766)	7248
44298	7590	04/02/2008	EXAMINER	
DOCKET CLERK			SAFAIPOUR, BOBBAK	
PO BOX 12608			ART UNIT	PAPER NUMBER
DALLAS, TX 75225			2618	
			MAIL DATE	DELIVERY MODE
			04/02/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/840,191

Applicant(s)

FUNNELL ET AL.

Examiner

BOBBAK SAFAIPOUR

Art Unit

2618

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 January 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 33-65 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 33-65 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☒ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/CI/CDC)
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date: _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____
- Paper No(s)/Mail Date 1/08/2008

DETAILED ACTION

This Action is in response to Applicant's response filed on 1/8/2008. Claims 1-32 have been cancelled. **Claims 33-65** are still pending in the present application. **This action is made FINAL.**

Response to Arguments

Applicant's arguments have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out

the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 33-65 rejected under 35 U.S.C. 103(a) as being unpatentable over **Vialen et al.** (US 6,917,807; hereinafter **Vialen**) in view of **Jang et al.** (US 2003/0211847; hereinafter **Jang**).

Consider **claim 33**, Vialen discloses a method to select a cell in a mobile communications equipment (MCE), the MCE configurable for use in a cellular network (abstract), the method comprising:

beginning state transition activity, the MCE currently in the connected mode state (figures 2-4; col. 3, lines 53 to col. 4, line 13; signaling between UTRAN and UE);

identifying a candidate cell set, the candidate cell set members corresponding to UMTS-based cells (figure 2-4; col. 4, lines 13-65; selection of cell to be suggested), and

selecting a member from the candidate cell set (figures 2-4; col. 3, lines 53 to col. 4, lines 13; selection of cell).

Vialen fails to specifically disclose transitioning from a connected mode state to an idle mode state; at least one member also corresponding to a cell which is not currently supporting the first connected mode state; and transitioning to an idle mode state.

In related art, Jang discloses transitioning from a connected mode state to an idle mode state (figure 2, "call release to MS idle state; paragraphs 12-13 and 26-30; transitioning to the idle state); at least one member also corresponding to a cell which is not currently supporting the

first connected mode state (figure 2, “call release to MS idle state; paragraphs 12-13 and 26-30; RETURN_TO_IDLE indicator); and transitioning to an idle mode state (paragraphs 12-13 and 26-30; transitioning to the idle state).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the teachings of Jang into the teachings of Vialen for enhanced traffic balance management.

Consider **claim 42**, Vialen discloses a mobile communications equipment (MCE) configured for use in a cellular network (abstract), comprising: to determine a candidate cell set, the candidate cell set members corresponding to UMTS-based cells (figure 2-4; col. 4, lines 13-65; selection of cell to be suggested), configured to select a member from the candidate cell set (figures 2-4; col. 3, lines 53 to col. 4, lines 13; selection of cell).

Vialen fails to specifically disclose a processor and operating environment configured to run software processes, the software processes configured to enable the MCE to transition from a connected mode state to an idle mode state and further comprising at least one member corresponding to a cell which is not currently supporting the connected mode state and to use the selected member when transitioning to the idle mode state.

In related art, Jang discloses a processor and operating environment configured to run software processes, the software processes configured to enable the MCE to transition from a connected mode state to an idle mode state (figure 2, “call release to MS idle state; paragraphs 12-13 and 26-30; transitioning to the idle state) and further comprising at least one member corresponding to a cell which is not currently supporting the connected mode state (figure 2,

“call release to MS idle state; paragraphs 12-13 and 26-30; RETURN_TO_IDLE indicator) and to use the selected member when transitioning to the idle mode state (paragraphs 12-13 and 26-30; transitioning to the idle state).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the teachings of Jang into the teachings of Vialen for enhanced traffic balance management.

Consider **claim 51**, Vialen discloses a method to select a cell in a mobile communications equipment (MCE) the MCE configurable for use in a cellular network (abstract), the method comprising:

beginning state transition activity, the MCE currently in the first connected mode state (figures 2-4; col. 3, lines 53 to col. 4, line 13; signaling between UTRAN and UE);

identifying a candidate cell set, the candidate cell set members corresponding to UMTS-based cells (figure 2-4; col. 4, lines 13-65; selection of cell to be suggested);

selecting a member from the candidate cell set (figures 2-4; col. 3, lines 53 to col. 4, lines 13; selection of cell).

Vialen fails to specifically disclose when transitioning from a first connected mode state to a second connected mode state, and at least one member also corresponding to a cell which is not currently supporting the first connected mode state transitioning to the second connected mode state using the selected member, where the first and second connected mode states are, each, one of: Cell_FACH, Cell_PCH, and URA PCH.

In related art, Jang discloses transitioning from a first connected mode state to a second connected mode state (figure 2, “call release to MS idle state; paragraphs 12-13 and 26-30; transitioning to the idle state), and at least one member also corresponding to a cell which is not currently supporting the first connected mode state transitioning to the second connected mode state using the selected member (figure 2, “call release to MS idle state; paragraphs 12-13 and 26-30; RETURN_TO_IDLE indicator), where the first and second connected mode states are, each, one of: Cell_FACH, Cell_PCH, and URA PCH (paragraph 29).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the teachings of Jang into the teachings of Vialen for enhanced traffic balance management.

Consider **claim 59**, Vialen discloses a mobile communications equipment (MCE) configured for use in a cellular network (abstract), comprising: to determine a candidate cell set, the candidate cell set members corresponding to UMTS-based cells (figure 2-4; col. 4, lines 13-65; selection of cell to be suggested), configured to select a member from the candidate cell set (figures 2-4; col. 3, lines 53 to col. 4, lines 13; selection of cell).

Vialen fails to specifically disclose a processor and operating environment configured to run software processes, the software processes configured to enable the MCE to transition from a first connected mode state to a second connected mode state, and further comprising at least one member corresponding to a cell which is not currently supporting the first connected mode state to use the selected member when transitioning to the second connected mode state where the

first and second connected mode states are, each, one of: Cell_FACH, Cell_PCH, and URA_PCH.

In related art, Jang discloses a processor and operating environment configured to run software processes, the software processes configured to enable the MCE to transition from a first connected mode state to a second connected mode state (figure 2, “call release to MS idle state; paragraphs 12-13 and 26-30; transitioning to the idle state), and further comprising at least one member corresponding to a cell which is not currently supporting the first connected mode state to use the selected member when transitioning to the second connected mode state (figure 2, “call release to MS idle state; paragraphs 12-13 and 26-30; RETURN_TO_IDLE indicator) where the first and second connected mode states are, each, one of: Cell_FACH, Cell_PCH, and URA_PCH (paragraphs 29).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the teachings of Jang into the teachings of Vialen for enhanced traffic balance management.

Consider **claim 34**, and **as applied to claim 33 above**, Vialen, as modified by Jang, discloses the claimed invention wherein said at least one member corresponds to a cell identified to the MCE by a network. (Vialen: figures 2-4; col. 3, lines 53 to col. 4)

Consider **claim 35**, and **as applied to claim 33 above**, Vialen, as modified by Jang, discloses the claimed invention wherein said at least one member corresponds to a cell neighbouring a cell supporting the connected mode state. (Vialen: figures 2-4; col. 3, lines 53 to

col. 4)

Consider **claim 36**, and **as applied to claim 33 above**, Vialen, as modified by Jang, discloses the claimed invention wherein said at least one member further comprises stored information arising from past data gathering by the MCE and corresponding to the same cell. (Jang: figure 2; paragraphs 12-12 and 26-30)

Consider **claim 37**, and **as applied to claim 36 above**, Vialen, as modified by Jang, discloses the claimed invention wherein said stored information stored comprises power measurement data. (Jang: figure 2; paragraphs 12-12 and 26-30)

Consider **claim 38**, and **as applied to claim 37 above**, Vialen, as modified by Jang, discloses the claimed invention wherein storing information comprising power measurements with respect to a plurality of members of the candidate cell set, the information gathered previous to the beginning state transition activity; and selecting the selected member based at least in part on said power measurements. (Jang: figure 2; paragraphs 12-12 and 26-30)

Consider **claim 39**, and **as applied to claim 33 above**, Vialen, as modified by Jang, discloses the claimed invention wherein the connected mode state comprises one of Cell_DCH, Cell_FACH, Cell_PCH, and URA_PCH. (Vialen: col. 2, lines 18-26; Jang: paragraph 29)

Consider **claim 40**, and **as applied to claim 33 above**, Vialen, as modified by Jang, discloses the claimed invention wherein the candidate cell set comprises active cell(s) used to support the connected mode state. (Vialen: figures 2-4; col. 3, lines 53 to col. 4)

Consider **claim 41**, and **as applied to claim 33 above**, Vialen, as modified by Jang, discloses the claimed invention wherein the candidate cell set comprises the serving cell used to support the connected mode state. (Vialen: figures 2-4; col. 3, lines 53 to col. 4)

Consider **claim 43**, and **as applied to claim 42 above**, Vialen, as modified by Jang, discloses the claimed invention wherein the at least one member corresponds to a cell identified to the MCE by a network. (Vialen: figures 2-4; col. 3, lines 53 to col. 4)

Consider **claim 44**, and **as applied to claim 42 above**, Vialen, as modified by Jang, discloses the claimed invention wherein the at least one member corresponds to a cell neighboring a cell supporting the connected mode state. (Vialen: figures 2-4; col. 3, lines 53 to col. 4)

Consider **claim 45**, and **as applied to claim 42 above**, Vialen, as modified by Jang, discloses the claimed invention wherein the at least one member further comprises stored information, the stored information gathered by the MCE corresponding to the at least one cell. (Jang: figure 2; paragraphs 12-12 and 26-30)

Consider **claim 46**, and **as applied to claim 45 above**, Vialen, as modified by Jang, discloses the claimed invention wherein the stored information comprises power measurement data. (Jang: figure 2; paragraphs 12-12 and 26-30)

Consider **claim 47**, and **as applied to claim 46 above**, Vialen, as modified by Jang, discloses the claimed invention wherein stored information comprising power measurements with respect to a plurality of members of the candidate cell set, the information gathered previous to the state transition; and wherein the selection of the selected cell is based at least in part on said power measurements. (Jang: figure 2; paragraphs 12-12 and 26-30)

Consider **claim 48**, and **as applied to claim 42 above**, Vialen, as modified by Jang, discloses the claimed invention wherein the connected mode state comprises one of Cell_DCH, Cell_FACH, Cell_PCH, and URA_PCH. (Vialen: col. 2, lines 18-26; Jang: paragraph 29)

Consider **claim 49**, and **as applied to claim 42 above**, Vialen, as modified by Jang, discloses the claimed invention wherein the candidate cell set comprises active cell(s) used to support the connected mode state. (Vialen: figures 2-4; col. 3, lines 53 to col. 4)

Consider **claim 50**, and **as applied to claim 42 above**, Vialen, as modified by Jang, discloses the claimed invention wherein the candidate cell set comprises the serving cell used to support the connected mode state. (Vialen: figures 2-4; col. 3, lines 53 to col. 4)

Consider **claim 52**, and **as applied to claim 51 above**, Vialen, as modified by Jang, discloses the claimed invention wherein said at least one member corresponds to a cell identified to the MCE by a network. (Vialen: figures 2-4; col. 3, lines 53 to col. 4)

Consider **claim 53**, and **as applied to claim 51 above**, Vialen, as modified by Jang, discloses the claimed invention wherein said at least one member corresponds to a cell neighbouring a cell supporting the first connected mode state. (Vialen: figures 2-4; col. 3, lines 53 to col. 4)

Consider **claim 54**, and **as applied to claim 51 above**, Vialen, as modified by Jang, discloses the claimed invention wherein said at least one member further comprises stored information arising from past data gathering by the MCE and corresponding to the same cell. (Jang: figure 2; paragraphs 12-12 and 26-30)

Consider **claim 55**, and **as applied to claim 54 above**, Vialen, as modified by Jang, discloses the claimed invention wherein said stored information stored comprises power measurement data. (Jang: figure 2; paragraphs 12-12 and 26-30)

Consider **claim 56**, and **as applied to claim 55 above**, Vialen, as modified by Jang, discloses the claimed invention wherein storing information comprising power measurements with respect to a plurality of members of the candidate cell set, the information gathered previous

to the beginning state transition activity; and selecting the selected member based at least in part on said power measurements. (Jang: figure 2; paragraphs 12-12 and 26-30)

Consider **claim 57**, and **as applied to claim 51 above**, Vialen, as modified by Jang, discloses the claimed invention wherein the candidate cell set comprises active cell(s) used to support the first connected mode state. (Vialen: figures 2-4; col. 3, lines 53 to col. 4)

Consider **claim 58**, and **as applied to claim 51 above**, Vialen, as modified by Jang, discloses the claimed invention wherein the candidate cell set comprises the serving cell used to support the first connected mode state. (Vialen: figures 2-4; col. 3, lines 53 to col. 4)

Consider **claim 60**, and **as applied to claim 59 above**, Vialen, as modified by Jang, discloses the claimed invention wherein the at least one member corresponds to a cell identified to the MCE by a network. (Vialen: figures 2-4; col. 3, lines 53 to col. 4)

Consider **claim 61**, and **as applied to claim 59 above**, Vialen, as modified by Jang, discloses the claimed invention wherein the at least one member corresponds to a cell neighbouring a cell supporting the first connected mode state. (Vialen: figures 2-4; col. 3, lines 53 to col. 4)

Consider **claim 62**, and **as applied to claim 59 above**, Vialen, as modified by Jang, discloses the claimed invention wherein the at least one member further comprises stored

information, the stored information gathered by the MCE corresponding to the at least one cell. (Jang: figure 2; paragraphs 12-12 and 26-30)

Consider **claim 63**, and **as applied to claim 62 above**, Vialen, as modified by Jang, discloses the claimed invention wherein the stored information comprises power measurement data with respect to a plurality of members of the candidate cell set, the information gathered previous to the state transition; and wherein the selection of the selected cell is based at least in part on said power measurements. (Jang: figure 2; paragraphs 12-12 and 26-30)

Consider **claim 64**, and **as applied to claim 59 above**, Vialen, as modified by Jang, discloses the claimed invention wherein the candidate cell set comprises active cell(s) used to support the first connected mode state. (Vialen: figures 2-4; col. 3, lines 53 to col. 4)

Consider **claim 65**, and **as applied to claim 59 above**, Vialen, as modified by Jang, discloses the claimed invention wherein the candidate cell set comprises the serving cell used to support the first connected mode state. (Vialen: figures 2-4; col. 3, lines 53 to col. 4)

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any response to this Office Action should be **faxed to (571) 273-8300 or mailed to:**

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Alexandria, VA 22314

Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Bobbak Safaipoor whose telephone number is (571) 270-1092. The Examiner can normally be reached on Monday-Friday from 9:00am to 5:00pm.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Lana Le can be reached on (571) 272-7891. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free) or 703-305-3028.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist/customer service whose telephone number is (571) 272-2600.

Bobbak Safaipoor
B.S./bs

March 27, 2008

/Lana N. Le/

Acting SPE of Art Unit 2618